



SIMATIC S7-1200, Relay output SM 1226, F-DQ 2x RLY 5A, PROFIsafe, 70 mm overall width, up to PL E (ISO 13849-1)/ SIL3 (IEC 61508)

General information	
Product type designation	SM 1226, F-DQ 2x relay/5 A
Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
power supply according to NEC Class 2 required	No
Input current	
from backplane bus 5 V DC, max.	120 mA
Digital outputs	
<ul style="list-style-type: none"> <li>from load voltage L+, max.</li> </ul>	300 mA
Power loss	
Power loss, typ.	10 W
Digital outputs	
Number of digital outputs	2
Short-circuit protection	No
Output voltage	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>Rated value (AC)</li> </ul>	5 V DC to 30 V DC 5 V AC to 250 V AC
Output current	
<ul style="list-style-type: none"> <li>for signal "1" permissible range, max.</li> </ul>	5 A maximum per circuit and 10 A maximum of all circuits per module
Relay outputs	
<ul style="list-style-type: none"> <li>Number of relay outputs</li> </ul>	2; 2 circuits per output
Switching capacity of contacts	
<ul style="list-style-type: none"> <li>with inductive load, max.</li> <li>with resistive load, max.</li> </ul>	0.1 Hz, accordance with IEC 60947-5-1, DC-13; 2 Hz, accordance with IEC 60947-5-1, AC-15 2 Hz
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> <li>unshielded, max.</li> </ul>	200 m 200 m
Interrupts/diagnostics/status information	
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>for status of the outputs</li> </ul>	Yes
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
FM approval	Yes
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> <li>Performance level according to ISO 13849-1</li> </ul>	Category 4, PL e

<ul style="list-style-type: none"> <li>• SIL acc. to IEC 61508</li> </ul>	SIL 3
Probability of failure (for service life of 20 years and repair time of 100 hours)	
<ul style="list-style-type: none"> <li>— Low demand mode: PFDavg in accordance with SIL3</li> </ul>	< 1.00E-05
<ul style="list-style-type: none"> <li>— High demand/continuous mode: PFH in accordance with SIL3</li> </ul>	< 4.00E-09
<b>Ambient conditions</b>	
Free fall	
<ul style="list-style-type: none"> <li>• Fall height, max.</li> </ul>	0.3 m; five times, in product package
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> </ul>	0 °C
<ul style="list-style-type: none"> <li>• max.</li> </ul>	55 °C
<ul style="list-style-type: none"> <li>• permissible temperature change</li> </ul>	5°C to 55°C, 3°C / minute
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>• min.</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• max.</li> </ul>	70 °C
Air pressure acc. to IEC 60068-2-13	
<ul style="list-style-type: none"> <li>• Storage/transport, min.</li> </ul>	660 hPa
<ul style="list-style-type: none"> <li>• Storage/transport, max.</li> </ul>	1 080 hPa
Relative humidity	
<ul style="list-style-type: none"> <li>• Operation at 25 °C without condensation, max.</li> </ul>	95 %
<b>Mechanics/material</b>	
Enclosure material (front)	
<ul style="list-style-type: none"> <li>• Plastic</li> </ul>	Yes
<b>Dimensions</b>	
Width	70 mm
Height	100 mm
Depth	75 mm
<b>Weights</b>	
Weight, approx.	300 g